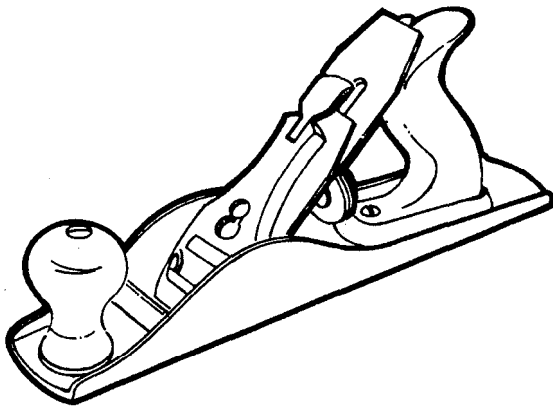


Chapter 50 PLANES

HOW TO CHOOSE AND USE THEM

The "Types and Uses" section provides you with a list of some of the types of planes. These pages should help you select the right plane to do the job.

The "Using" section tells you how to use planes to perform the desired function. The "Care" procedures tell you how to care for the item.



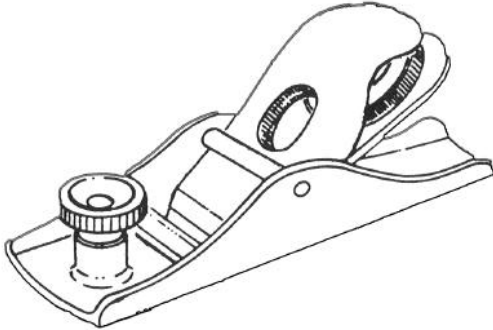
INDEX

<i>/tem</i>	<i>Page</i>
TYPES AND USES	50-2
Block plane	50-2
Bench plane	50-2
SAFETY	50-2
USING	50-3
CARE	50-4

TYPES AND USES

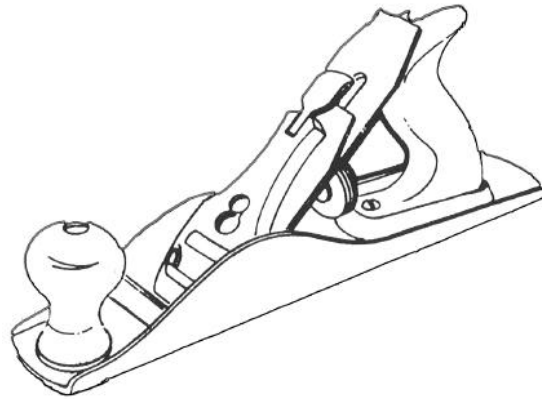
Planes are smoothing tools used to true edges or surfaces of wood. Planes also are used where a finished surface or close-fitting joints are required. Planes vary in size and shape, but each is designed for a specific purpose. The two types of planes most generally used are the block plane and bench plane.

BLOCK PLANE



The block plane is the smallest type of plane. It is available in a variety of patterns and is designed to cut end grain with the cutting blade set between 12 degrees and 20 degrees. Although it can usually be used with one hand, a toe knob is provided when additional pressure is needed.

BENCH PLANE



One of the most common types of bench planes is the jack plane. Like all bench planes, the jack plane is designed for cutting with the grain of the wood. Its cutting blade is set at approximately 45 degrees and is used for all purpose planing or to cut lumber to specified lengths.

SAFETY

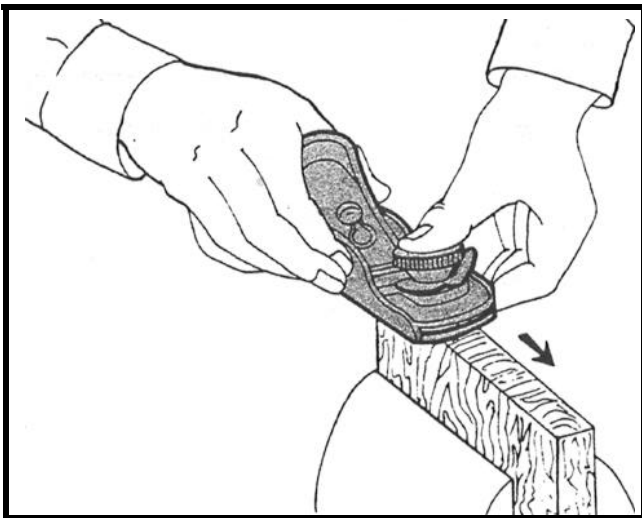
1. Be careful to plane work smoothly to avoid splinters that may be left to cause injury.
2. Use each plane only for the job it is intended.
3. Keep all cutting tools in good condition.
4. Do not allow tools to lie around work areas in such a position that they may cause injury to others.
5. Before using, inspect the tool for damage or other defects. Repair or replace immediately if required.

USING THE BLOCK PLANE

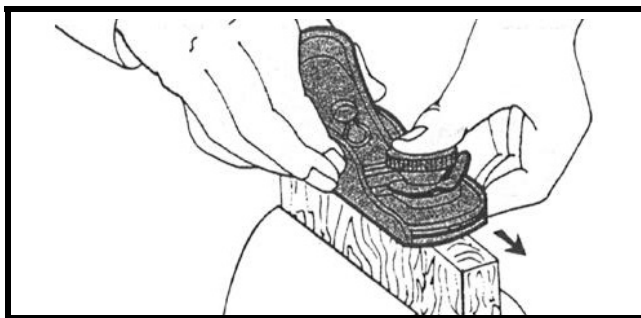
WARNING

WEAR EYE PROTECTION WHEN WORKING WHERE FLYING PARTICLES MAY CAUSE EYE INJURY.

- 1 Secure work with a vise or with clamps to prevent slippage.
- 2 Ensure that the cutting blade is extremely sharp and set to produce a fine cut.



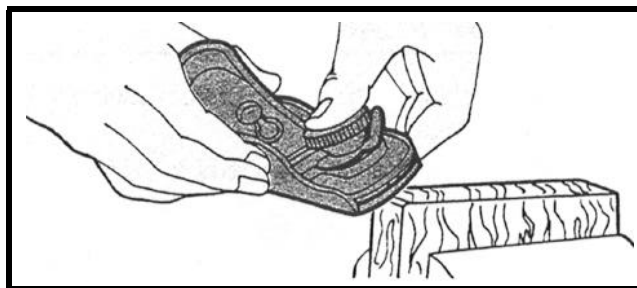
- 3 Place the plane on the edge of board with the plane pointing across the grain.



- 4 Push along the length of the board with a steady, even stroke.

NOTE

Plane from either end to prevent the grain splitting or plane a chamfer on the far end first, as shown.



- 5 Raise the plane from the work after each stroke and return to the starting point.
- 6 Repeat the process until the task is complete.

USING THE BENCH PLANE

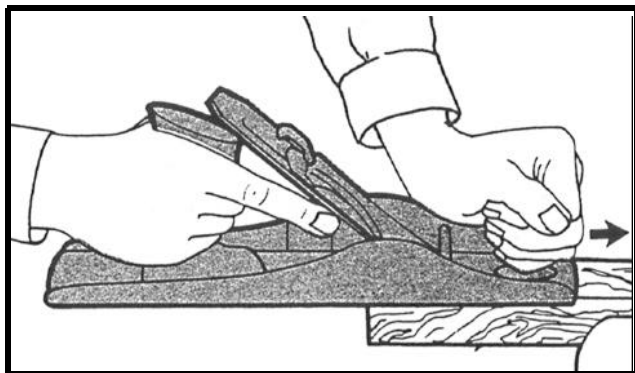
WARNING

WEAR EYE PROTECTION WHEN WORKING WHERE FLYING PARTICLES MAY CAUSE EYE INJURY

- 1 Secure work with a vise or with clamps to prevent slippage.
- 2 Make sure the plane is sharp and properly adjusted before using.
- 3 Place the plane on the board with the right hand on the handle and the left hand on the knob.

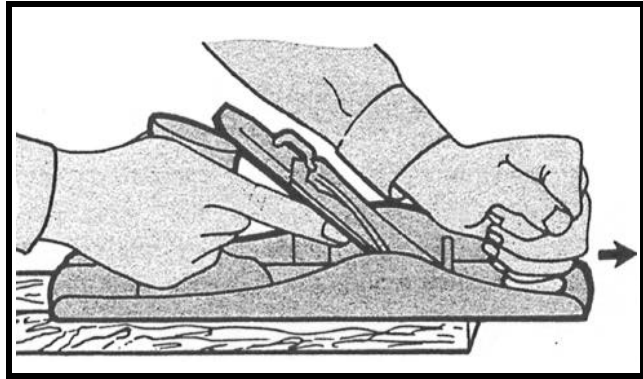
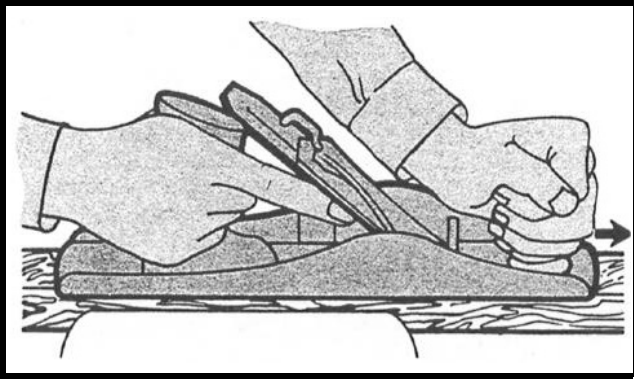
NOTE

Reverse the position of the hands if left-handed.



- 4 Check to insure the plane is placed on the work so that the wood grain points in the direction the plane will go.

USING THE BENCH PLANE - Continued



- 5 Push with a steady, even stroke along the length of the board.
- 6 Raise the plane and return to the starting point after each stroke.
- 7 Repeat the process until the task is completed.

CARE OF PLANES

1. Place the plane on its side to protect cutting edge when not in use.
2. Keep the cutting edge sharp and free of nicks.
3. Cover all metal parts with light oil to prevent rusting.
4. For storage, withdraw the cutting edge into the mouth of the plane.